S. R. BABBIDGE.

CENTER-BOARDS FOR VESSELS.

No. 195,741. Patented Oct. 2, 1877

Fig. 1

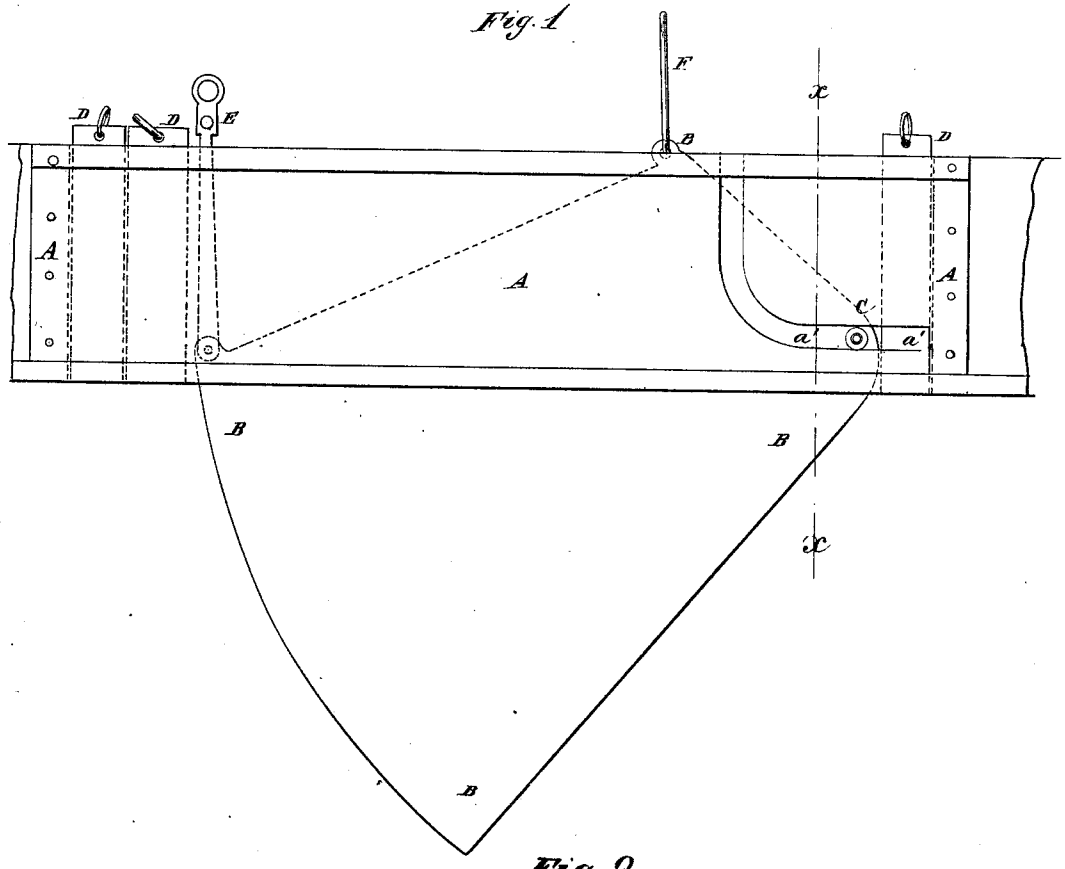
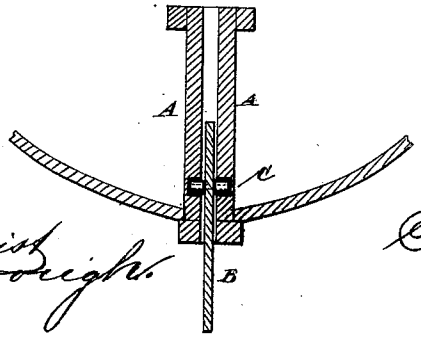


Fig. 2



WITNESSES:

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UNITED STATES PATENT OFFICE.

STEPHEN R. BABBIDGE, OF ROCKLAND, MAINE.

IMPROVEMENT IN CENTER-BOARDS FOR VESSELS.

Specification forming part of Letters Patent No. **195,741**, dated October 2, 1877; application filed August 11, 1877.

To all whom it may concern:

Be it known that I, STEPHEN R. BABBIDGE, of Rockland, in the county of Knox and State of Maine, have invented a new and useful Improvement in Center-Board Vessels, of which the following is a specification:

Figure 1 is a side view of a center-board well, illustrating my invention, the groove being uncovered. Fig. 2 is a detail section of the same taken through the line *x x* Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish center-board vessels so constructed that the center-board may be adjusted to equalize the center of resistance with the center of pressure from the sails, to prevent carrying a weather or lee helm.

The invention consists in the horizontal grooves formed in the sides of the well or trunk to receive the pin attached to the lower forward corner of the center-board, to enable said center-board to be adjusted horizontally; in the vertical or inclined grooves formed in the sides of the well, in connection with the horizontal grooves, and the pin attached to the lower forward corner of the center-board, to enable the said center-board to be shipped and unshipped from the deck; and in the combination of the stop-water boards, with the well and the center-board, as hereinafter fully described.

A represents the center-board well or trunk, which is constructed in the vessel in the usual way. B is the center-board, to the lower forward corner of which is secured a cross-pin, C, the ends of which enter horizontal grooves a^1 in the sides of the well A, and have small rollers placed upon them to diminish the friction as the center-board is moved forward and back in adjusting it as the center of pressure from the sails varies, so that the helm may be kept as near as possible in line with the length of the vessel, to prevent the vessel from being retarded by the resistance of the water against the rudder.

To enable this adjustment to be made, the well or trunk A must be made longer than the center-board B. The space thus left is filled with stop-water boards D, which may be placed in either end of the well A, according to the position in which the center-board B may be. The stop-water boards D prevent dead-water from forming in the end parts of the well.

a^2 are vertical grooves formed in the sides of the well A, and leading from its top down to the horizontal grooves a^1. The grooves a^2 may meet the grooves a^1 with a curve, as shown in Fig. 1, or at an acute or right angle, as may be desired. The grooves a^2 enable the center-board B to be shipped and unshipped from the deck. The center-board B is raised, lowered, and adjusted by a bar, rope, or chain, E, attached to its rear upper corner.

A bar, rope, or chain, F, may be attached to the forward upper corner of the center-board B, to assist in adjusting, shipping, and unshipping it.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The well or trunk A, having horizontal grooves a^1 formed in its sides, in combination with the center-board B, having a pin, C, attached to its forward corner, entering the grooves in said well or trunk, to enable the center-board to be adjusted longitudinally, substantially as herein shown and described.

2. The well or trunk A, having the vertical or inclined grooves a^2 and the horizontal grooves a^1 formed in the sides thereof, in combination with the center-board provided with the pin C, to enable said center-board to be shipped and unshipped from the deck, substantially as herein shown and described.

3. The combination of the stop-water board D with the well A and the center-board B, substantially as herein shown and described.

STEPHEN RITCHARDSON BABBIDGE.

Witnesses:
GEO. R. HEFFNER,
CALEB H. BAKER.